

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 2/4/09. Of the previously presented claims 2-4, 7-11, 14, and 16-18; claims 2- 4, 7-11, 14, and 16-18 were amended. The 102 rejection below has been corrected to indicate that claim 14 is rejected not claim 9.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 6/5/09 has been considered by the examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-4, 7-11, 14, 16-18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, lines 1-9 of the claim recites a communication system comprising: a communication terminal device, a plurality of low order switching devices, a plurality of base stations, a plurality of secondary low order switching devices, and a high order switching device which describes a specific structure of the system. The

remainder of the claim recites: a first determiner, a first transmitter, a first generator, a second generator and a second transmitter that perform a specific function for transmitting packet data in a multicast manner. The claim is indefinite because there is no linking or association between the devices of the system (communication terminal device, high order switching device, etc.) and the components (first determiner, first transmitter, etc.). Without this distinction the different components can be interpreted to be in any of the system devices or any combination thereof which renders the claim indefinite.

Regarding claim 3, the limitations are rejected for the reasons applied to claim 2.

Regarding claim 7, the preamble of the claim, lines 1-3, recite a multicast switching device configured to transmit packet data in a multicast manner when a communication terminal device transmits data to a mobile terminal through a plurality of base stations. The claim implies that the multicast switching device is between or at a lower level of hierarchy than the communication terminal device because it transmits data in a multicast manner when a communication terminal device transmits (highest level) data to a mobile terminal through a plurality of base stations (lowest level). Based on the levels of hierarchy and specific structure of the system, the subject matter of the claim implies that the multicast switching device is either the high or low order switching device. In lines 13-17 of the claim, the "said transmission target packet data includes packet data transmitted to a high order switching device and based on a number of low order switching devices that are destinations of multicast transmission by the high order switching device". The subject matter of this limitation implies that data is transmitted to

the high order switching device for which the low order switching devices are a destination. The linking between the preamble and this limitation is indefinite because the preamble implies that the “multicast switching device” is either a high or low order switching device, but according to the aforementioned limitation, data is transmitted to a high order switching device for which a low order switching device is a destination. The claim is indefinite because a device can not transmit data to itself in the case the “multicast switching device” is a high order switching device, nor can it transmit data intended for itself, in the case the “multicast switching device” is a low order switching device.

Regarding claims 8 and 10, the limitations are rejected for the reasons applied to claim 7.

Regarding claims 4, 9, 11, and 16-18, the limitations are rejected because they are dependent on the independent claims above.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Langlet et al. (US 5,930,248).

Langlet teaches a communication method wherein a communication terminal device (figure 1, item 14; PSTN) transmits data to a mobile terminal through a plurality of base stations (figure 1, item 20; BTS), comprising:

a plurality of switching devices transmitting, via a high order switching device (MSC), packet data in a multicast manner to a plurality of low order switching devices (BSC) included in communication paths between the communication terminal device and the plurality of base stations (column 5, lines 35-38; data is transmitted through multicast channels);

transmitting the packet data in a multicast manner from the plurality of low order switching devices to the plurality of base stations (column 5, lines 45-60; BSC allocates multicast channels for transmission);

determining a transmission time for the high order switching device and each of the plurality of low order switching devices to transmit packet data resulting in simultaneous data reception at the mobile terminal (column 9, lines 20-40; MSC may control multicast allocation),

transmitting packet data resulting in simultaneous data reception at the mobile terminal, based on the transmission timing determined by the determining (column 5, lines 35-38); a multicast transmission means that data is transmitted for simultaneous data reception at the mobile unit); and

generating a plurality of radio slot data (timeslots), based on transmission target packet data (column 5, lines 35-45; timeslots are allocated for the data to be sent on the multicast channel).

Allowable Subject Matter

6. Claims 2-4, 7-11, and 16-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7. Applicant's arguments with respect to claim 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/
Examiner, Art Unit 2617